

**AMENDMENTS TO THE SPECIFICATION**

**Please add the following new Abstract of the Disclosure:**

A method for engineering traffic between an ingress router and an egress router of a packet network, whereby the traffic is scheduled within the ingress router in queues pertaining to different service classes, and whereby part of the traffic follows a dedicated tunnel between the ingress and egress routers, includes the step of provisioning of a tunnel queue dedicated to the part of the traffic intended to flow via the dedicated tunnel, for separately and temporarily storing the part of the traffic towards the dedicated tunnel, and a further step of shaping the part of the traffic towards the dedicated tunnel before entering the traffic tunnel. Further embodiments include the provisioning of a set of queues, pertaining to the different service classes, to one or more of these dedicated traffic tunnels, as well as the provisioning of associated shapers.